IN THE CLAIMS:

Amendments to the Claims

Please amend claim 27 and please add the new claims as shown below.

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

16. (previously presented) A thin film head having a reading part and a recording part comprising:

an upper magnetic pole; and

a lower magnetic pole having a lower magnetic main layer, a lower magnetic pole front end portion on the lower magnetic main layer, and a projection step portion on the lower magnetic pole front end portion;

wherein the projection step portion has a wider step portion at a predetermined depth from an air bearing surface which is wider than a width of the projection step portion at the air bearing surface, the wider step portion being wider than a width in a track direction of the upper magnetic pole at the predetermined depth from the air bearing surface.

17. (previously presented) The thin film head according to claim 16, wherein the wider step portion has rectangular contours.

18. (previously presented) The thin film head according to claim 16, wherein the wider step portion has curved contours.

19. (previously presented) The thin film head according to claim 16, wherein the wider step portion has flare structure contours.

20. (previously presented) A thin film head having a reading part and a recording part comprising:

an upper magnetic pole; and

a lower magnetic pole having a lower magnetic main layer, a lower magnetic pole front end portion on the lower magnetic main layer, and a projection step portion on the lower magnetic pole front end portion;

wherein the projection step portion has a pair of wider step areas at a predetermined depth from an air bearing surface which are wider than a width of the projection step portion at the air bearing surface, and a width in a track width direction of the projection step portion at the predetermined depth from the air bearing surface is wider than a width in the track width direction of the upper magnetic pole at the predetermined depth from the air bearing surface.

21. (previously presented) The thin film head according to claim 20, wherein each of the wider step areas has rectangular contours.

22. (previously presented) The thin film head according to claim 20, wherein each of the wider steps has curved contours.

23. (previously presented) The thin film head according to claim 20, wherein each of the wider step areas has flare structure contours.

24. (previously presented) A thin film head having a reading part and a recording part comprising:

an upper magnetic pole; and

a lower magnetic pole having a lower magnetic main layer, a lower magnetic pole front end portion on the lower magnetic main layer, and a projection step portion on the lower magnetic pole front end portion;

wherein a width in a track width direction of the projection step portion at an air bearing surface is substantially equal to a width in the track width direction of the upper magnetic pole at the air bearing surface; and

wherein a width in the track width direction of the projection step portion at a predetermined depth from the air bearing surface is wider than a width in the track width direction of the upper magnetic pole at the predetermined depth from the air bearing surface.

25. (previously presented) The thin film head according to claim 24, wherein the projection step portion at the predetermined depth from the air bearing surface has rectangular contours.

26. (previously presented) The thin film head according to claim 24, wherein the projection step portion at the predetermined depth from the air bearing surface has curved contours.

27. (currently amended) The thin film head according to claim ~~14~~ 24, wherein the projection step portion at the predetermined depth from the air bearing surface has flare structure contours.

28. (new) The thin film head according to claim 16, wherein a distance from the air bearing surface to an edge of the upper magnetic pole at a predetermined

track direction shift position is longer than a distance from the air bearing surface to an edge of the wider step portion at the predetermined track direction shift position.

29. (new) The thin film head according to claim 20, wherein a distance from the air bearing surface to an edge of the upper magnetic pole at a predetermined track direction shift position is longer than a distance from the air bearing surface to an edge of the wider step areas at the predetermined track direction shift position.

30. (new) A thin film head having a reading part and a recording part comprising:

an upper magnetic pole; and

a lower magnetic pole having a lower magnetic main layer, a lower magnetic pole front end portion on the lower magnetic main layer, and a projection step portion on the lower magnetic pole front end portion;

wherein the projection step portion has a wider step portion at a predetermined depth from an air bearing surface which is wider than a width of the projection step portion at the air bearing surface; and

wherein a distance from the air bearing surface to an edge of the upper magnetic pole at a predetermined track direction shift position is longer than a distance from the air bearing surface to an edge of the wider step portion at the predetermined track direction shift position.

31. (new) The thin film head according to claim 30, wherein the wider step portion has rectangular contours.

32. (new) The thin film head according to claim 30, wherein the wider step portion has curved contours.

33. (new) The thin film head according to claim 30, wherein the wider step portion has flare structure contours.

34. (new) A thin film head having a reading part and a recording part comprising:

an upper magnetic pole; and

a lower magnetic pole having a lower magnetic main layer, a lower magnetic pole front end portion on the lower magnetic main layer, and a projection step portion on the lower magnetic pole front end portion;

wherein the projection step portion has a pair of wider step areas at a predetermined depth from an air bearing surface which are wider than a width of the projection step portion at the air bearing surface; and

wherein a distance from the air bearing surface to an edge of the upper magnetic pole at a predetermined track direction shift position is longer than a distance from the air bearing surface to an edge of the wider step areas at the predetermined track direction shift position.

35. (new) The thin film head according to claim 34, wherein each of the wider step areas has rectangular contours.

36. (new) The thin film head according to claim 34, wherein each of the wider steps has curved contours.

37. (new) The thin film head according to claim 34, wherein each of the wider step areas has flare structure contours.